

A FOSSIL MITE (*ACRONOTHRUS RAMUS* N.SP.) FROM CAINOZOIC RESIN AT ALLENDALE, VICTORIA

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For the opportunity of studying the single specimen found in the block of retinite from Allendale, Victoria, I am indebted to Prof. E. S. Hills of the Geology Department of the University of Melbourne.

The mite found belongs to the family Camisiidae (Oribatei), or Moss mites as they are popularly called in America. The Acarina of themselves are an archaic group of the Arachnoidea and probably the Oribatei is as archaic a group as any.

The species represented by the single example so far found in this fossil resin belongs to a living genus of which four or five species are known.

The Oribatei in general are moss or humus inhabiting mites, and such a habitat would doubtless account for the imprisonment of the specimen as the resin collected on exudation from trees.

The actual species would appear to be very close to *A. cophinarius* Michael from New Zealand agreeing in the single pair of 3-branched posterior apophyses, although Michael's figure shows the 2 basal branches on each apophysis as longer than in the new species, and apparently arising more from the body than from the main stem of the apophysis. Similarly the apophyses on the legs are relatively longer in *cophinarius*. The pseudostigmata appear from Michael's figure to be very much nearer together than in the new species. Interlamellar setae are not shown in Michael's figure, nor does he refer to them in his description, but they are present in the new species arising from a short tubular horn, as in Jacot's Marquesan species.

Superfamily ORIBATEI

Family CAMISIIDAE

Subfamily CAMISIINAE

Genus *Acronothrus* Berlese

Acronothrus Berlese 1916 Redia 12, 65; Jacot 1934. *Pacific Entom. Survey*, Publ. 7, art. 17.

Berlese did not define this genus; but erected the name only for Michael's species *Nothrus cophinarius* from New Zealand. Jacot (loc. cit.) gave a generic diagnosis as follows:

"Characters: Camisiinae with adanal covers distinct; anterior and posterior plates fused, parasterna and aggenital plates fused but distinct from the notogaster; pseudostigmata large, organs short, globular, not or barely protruding from pseudostigmata; rostrum entire.

Type, *Nothrus cophinarius* Michael: Linn. Soc. London, Jour., Zool., vol. 30, p. 142, pl. 19, figs. 13-16, 1908."

In the genus are also included *Nothrus unguifera* Michael 1908 from New Zealand, *A. nukuhivae* Jacot 1934 and *A. nukuhivae hivaoae* Jacot 1934 from the

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Marquesas, while Berlese referred his *Neoliodes americanus* and *Nothrus alluaudi*, the latter from oriental Africa, here.

***Acronothrus ramus* n.sp.**

Description. Adult ? female: Length $700\ \mu$, width $375\ \mu$; colour when freed from exuviae and debris brown; rostrum produced with slightly concave apex, the lateral corners produced as rounded knobs each with a short and rather stout seta; lamellae not very prominent, practically undeveloped, ending lateriorly in a long tubular horn-like apophysis from which arises a long inwardly curved, indistinctly barbed seta; interlamellar setae inserted on a short horn-like apophysis (setae themselves wanting in the specimen); pseudostigmata round, the head of the sensillae globular and scarcely protruding from pseudostigmata; medially on the proterosoma between the lamellae, the cuticle is tuberculate (cf. Fig. 1 A). Hysterosoma oval, deeply concave or depressed dorsally with a strongly chitinised lateral ridge; with eight short setae as in Fig. 1 A; subposteriorly with a pair of short apophyses from which arise long curved, barbed setae; posteriorly with two



FIG. 1.—*Acronothrus ramus*, n.sp.
nr. *cophinarius* Michael.

triramous apophyses with 3 long curved barbed setae; posteriorly the cuticle is punctate.

Legs strong, I 600μ long, II 525μ , III 480μ , IV 600μ ; all segments with apophyses bearing curved setae, those setae on basal segments barbed, the others shorter and finely ciliated (cf. Fig. 1 C, D); claws trihomohamate.

Ventral surface as in Fig. 1 B, genital plates large, median edge with 6 setae on each side; anal plates larger than genital with setae as figured; posterior with a pair of short curved setae on short tubercles; the setae on the sternal and parasternal plates are difficult to see but appear to be as shown, parasterna I appears to have only 1 seta, although Jacot states that 3 is the normal number in the genus; the inner edge of parasterna I and II are relatively well defined; on the inner edge of parasterna III is a short tubercular apophysis which probably carries a curved seta, but the latter is missing on both sides of the specimen. The mouthparts are not easy to define without dissection; the mandibles are normal, stout and with serrate chelae; the galea also appear to be toothed with a subbasal inner seta; the palpi appear four-segmented, the apical segment with a number of stout spine-like setae.

Locality. A single specimen from a 34 lb. lump of fossilised resin (retinite) from a deep lead at Allendale, Victoria, of probable Upper Tertiary, may be Pliocene age.

The specimen was dissolved out of the resin with alcohol, and the mounted slide is in the Geology Department of the University of Melbourne [Reg. No. 1977].